

Remarks:

Claims 1 to 16 are pending. Claim 17 has been cancelled. Claim 1 has been amended. Reconsideration of the application is respectfully requested.

Drawings:

The drawings have been objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “a jacket layer” in claim 17 must be shown or the feature(s) cancelled from the claims(s).

Claim 17 has been cancelled.

Claim Objections:

The informalities in claim 1 noted in the Office Action have been corrected. No new matter has been added.

Double Patenting:

Claims 1-8 and 11-17 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3-6, 8, 10 and 14-15 of Reid et al. (U.S. Patent No. 6,267,492).

The Office Action states in the table in paragraph 4 that “The light guide is read on the optical fiber; the glare shield is read on the continuous outer cladding layer.” Applicants respectfully traverse this double patenting rejection.

Applicants cladding layer is a coating comprising a material having an index of refraction greater than the core material (see, e.g., page 6, lines 6-7). Due to its index of refraction, the cladding acts to reduce stray emission of light from the sidewall of the core relative to an unclad light fiber (see, page 9, at lines 12-16). However, the cladding does not completely prevent light from being emitted from the light fiber. In fact, since the cladding typically extends radially over the side wall of the core of the light fiber (see, FIG. 3a-1 of Reid et al.), light emitted from the light fiber must pass through the cladding in order to be emitted.

Reid et al. does not teach or suggest a cladding material that is continuous over the lateral surface of the core and the optical element(s). The glare shield 540 is not a cladding layer.

Rather, the glare shield 540 is a device designed to reduce or prevent emitted light (which can cause glare if emitted directly toward a viewer) from obscuring or obstructing the vision of a person working around the light guide. Being designed to reduce or prevent emitted light from obscuring or obstructing the vision of a person working around the light guide, the glare shield is preferably generally located opposite from the light-emitting region of the light guide. Therefore, the glare shield is not continuous over lateral surface of the core and the optical elements as claimed by Applicants. In other embodiments, the glare shield comprises reflective optical elements (see, FIG. 3A of Reid et al.) or extraction strips (see, FIG. 3B of Reid et al.). Here again, as shown in the figures, the glare shield is not continuous over the lateral surface of the core and the optical elements. In addition, there is no teaching or suggestion to use a material having an index of refraction greater than the core material.

For the reasons discussed above, the rejection of claims 1-8 and 11-17 under the judicially created doctrine of obviousness-type double patenting as over claims 1, 3-6, 8, 10 and 14-15 of Reid et al. has been overcome and should be withdrawn.

The remaining double patenting rejection relates to dependent claims (i.e., claims 9, 10, and 18) that include all of the limitations of independent claim 1. Claim 1 is patentable for the reasons discussed above. Therefore, claims 9, 10, and 18 are also patentable.

35 USC §102 Rejections:

Claims 1-8, 11, 12, and 17 stand rejected under 35 USC § 102(e) as being anticipated by Reid et al. (U.S. Patent No. 6,267,492).

The Office Action states that “[r]egarding claim 1, Reid et al. disclose a light source (10), a light fiber (20) with an input end, a light emitting region with an optical element (126) and a continuous outer cladding layer (636) (figures 1-3 and 6).” Applicants disagree. The outer sleeve 636 is not a cladding layer. Rather, the outer sleeve 636 is a movable device that functions to attenuate light transmission from the light guide 620. The outer sleeve 636 can be moved along with the inner sleeve 630 between open and closed positions to provide various light emitting arrangements. By contrast, Applicants’ cladding layer is a coating comprising a material having an index of refraction greater than the core material (see, e.g., page 6, lines 6-7) that is in direct contact with the core and optical element(s) (see, for example, FIGS. 1, 1a, 3a-1, and 3c) and is adhered to the lateral surface of the core and the at least one optical element. Reid

et al. does not teach or suggest a cladding material that is continuous over the lateral surface of the core and the optical element(s). For the reasons discussed above, the rejection of claims 1-8 and 11-17 under the judicially created doctrine of obviousness-type double patenting as over claims 1, 3-6, 8, 10 and 14-15 of Reid et al. has been overcome and should be withdrawn.

The remaining rejections relate to dependent claims (i.e., claims 9, 10, and 18) that include all of the limitations of independent claim 1. Claim 1 is patentable for the reasons discussed above. Therefore, claims 9, 10, and 18 are also patentable.

35 USC §103(a) Rejections:

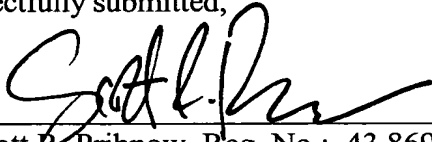
Claims 9, 10, 13-16 and 18 stand rejected under 35 USC § 103(a) as being obvious over Reid et al.

The rejection under 35 USC §103(a) relates only to dependent claims which should be found to be allowable if the independent claims are found to be allowable. Independent claim 1 is allowable for the reasons discussed above. Therefore, claims 9, 10, 13-16 and 18 are also patentable.

In view of the above, it is submitted that the application is in condition for allowance. Reconsideration of the application is requested. Allowance of claims 1-18 at an early date is solicited.

Respectfully submitted,

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Date

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VERSION WITH MARKINGS TO SHOW AMENDMENTS MADE

1(amended). An illumination device comprising:

(a) a light source;

(c) a light fiber comprising:

an elongate polymeric core having an input end for receiving light from [a] the light source, an output end for emitting light transmitted through the core, and a lateral surface extending along a longitudinal axis of the core between the input end and the output end;

a light-emitting region directing light traveling through the light fiber out of at least a portion the lateral surface of the light fiber in a direction generally transverse to the longitudinal axis, the light-emitting region comprising at least one optical element; and

a continuous outer cladding layer comprising a polymeric material having a lower index of refraction than the core extending over the lateral surface of the core and the at least one optical [elements] element;

wherein the light fiber is optically coupled to the light source such that at least a portion of the light emitted from the light source impinges on the input end of the light fiber.